PATENT CLAIMS

1. Use of phanquinone for the manufacture of a pharmaceutical composition for the treatment or prevention of Alzheimer's disease.

2. Use according to claim 1, wherein planquinone is administered in an amount of 5 mg to 250 mg one to three times daily.

3. Use according to any of the claims 1 or 2, wherein phanquinone is administered in an amount of 10 mg to 50 mg one to three times daily.

4. Use according to any of the claims 1 to 3, wherein a compound, or a mixture of compounds, selected from the group comprising antioxidants, acetylcholine enhancers, trace metals, prosthetic groups and clioquinol, is administered prior to, together with or subsequent to the administration of phanquinone.

5. Use of phanquinone and a compound, or a mixture of compounds, selected from the group comprising antioxidants, acetylcholine enhancers, trace metals, prosthetic groups and clioquinol,

for the manufacture of a pharmaceutical composition for the treatment or prevention of Alzheimer's disease.

6. Pharmaceutical composition comprising phanquinone and a compound, or a mixture of compounds, selected from the group comprising antioxidants, acetylcholine enhancers, trace metals, prosthetic groups and clioquinol provided, when clioquinol is selected, that at least one further compound is selected from the said group.

7. Use according to claim 4 or 5, or pharmaceutical composition according to claim 6, wherein the antioxidant is vitamin C, vitamin E, Q10, or a combination thereof.

8. Use according to claim 4, 5 or 7, or pharmaceutical composition according to claim 6 or 7, wherein the acetylcholine enhancer is donepezil.

9. Use according to claim 4, 5, 7 or 8, or pharmaceutical composition according to any of the claims 6 to 8, wherein the acetylcholine enhancer is tacrine.

10. Use according to claim 4, 5, 7, 8 or 9, or pharmaceutical composition according to any of the claims 6 to 9, wherein the acetylcholine enhancer is vitamin B_{12}.

11. Use according to claim 4 or 5, or any of the claims 7 to 10, wherein phanquinone and clioquinol are used for the manufacture of the pharmaceutical composition.

12. Use according to claim 4 or 5, or any of the claims 7 to 11, wherein phanquinone, clioquinol and vitamin B_{12} are used for the manufacture of the pharmaceutical composition.

13. Pharmaceutical composition according to any of the claims 6 to 10, comprising phanquinone, clioquinol and vitamin B_{12}.

14. Use according to any of the claims 1 to 5 and claims 7 to 13, or pharmaceutical composition according to any of the claim 6 to 10 or claim 13, wherein the pharmaceutical composition is formulated for oral, parenteral or intradermal administration.

15. Use according to any of the claims 1 to 5 and claims 7 to 13, or pharmaceutical composition according to any of the claims 6 to 10 or claim 13, wherein the pharmaceutical composition is formulated as a single pharmaceutical composition.

16. Use according to claim 4 or 5 or any of the claims 7 to 11, or pharmaceutical composition according to any of the claims 6 to 11 or claim 13, wherein the pharmaceutical composition is formulated as two or more separate pharmaceutical entities for sequential or substantially simultaneous administration.

17. A method of treating a subject having or suspected of having Alzheimer's disease comprising administering to the subject an amount of phanquinone effective to treat or prevent Alzheimer's disease.

18. A method of treating a subject having or suspected of having Alzheimer's disease comprising administering to the subject an amount of phanquinone effective to increase the solubility of amyloid-beta (Aβ) in the cerebrospinal fluid of said subject.

19. A method of treating a subject having or suspected of having Alzheimer's disease comprising administering to the subject

(a) an amount of phanquinone effective to treat or prevent Alzheimer's disease, and

(b) an amount of a compound or a mixture of compounds selected from the group comprising antioxidants, acetylcholine enhancers, trace metals, prosthetic groups and clioquinol.

20. The method according to claim 19, wherein the total amount of the compound(s) in (b) is sufficient for increasing the effect of the prevention or treatment of Alzheimer's disease or for inhibiting any detrimental side effect.

21. The method according to claim 19, wherein the amount of the compound(s) in (b) is 5 μg to 250 mg.

22. The method according to claim 19, wherein the antioxidant is selected from the group comprising vitamin C, vitamin E, Q10, or combinations thereof.

23. The method according to claim 19, wherein the acetylcholine enhancer is tacrine.

24. The method according to claim 19, wherein the acetylcholine enhancer is donepezil.

25. The method according to claim 19, wherein the prosthetic group is vitamin B_{12}.

26. A method of treating a subject having or suspected of having Alzheimer's disease comprising administering to the subject

(a) an amount of phanquinone effective to treat or prevent Alzheimer's disease, and

(b) an mixture of clioquinol and vitamin B_{12}, the amount of cliquinol being effective to treat or prevent Alzheimer's disease and the amount of vitamin B_{12} being effective to inhibit a detrimental side effect of clioquinol administration.

27. The method according to claim 26, wherein the amount of clioquinol is 5 mg to 250 mg.

28. The method according to claim 26, wherein the amount of clioquinol is 10 mg to 50 mg.

29. The method according to claim 26, wherein the amount of vitamin B_{12} is 5 μg to 2 mg.

30. The method according to claim 26, wherein the amount of vitamin B_{12} is 0,5 mg to 1 mg.

31. The method according to claim 19 or 26, wherein (a) phanquinone and (b) the compound(s) are comprised in a single pharmaceutical composition.

32. The method according to claim 19, wherein (a) phanquinone and (b) the compound(s) are administered substantially simultaneously.

33. The method according to claim 19, wherein (a) phanquinone and (b) the compound(s) are administered sequentially.

34. The method according to claim 26, wherein clioquinol and vitamin B_{12} are administered sequentially, phanquinone being administered together with clioquinol, vitamin B_{12} or separately.

35. The method according to claim 26, wherein clioquinol is administered in a first period followed by a second period, wherein vitamin B_{12} is administered, phanquinone being administered together with clioquinol, vitamin B_{12} or separately.

36. The method according to claim 35, wherein the first period is one to three weeks and the second period is one to four weeks.

37. The method according to any of the claims 17 to 36, wherein the subject is human.

38. The method according to claim 17, wherein phanquinone is administered for up to ten years.

39. The method according to claim 17, 19 or 26, wherein phanquinone is formulated for oral administration.

40. The method according to claim 17, 19 or 26, wherein phanquinone is formulated for parenteral administration.

41. The method according to claim 17, 19 or 26, wherein phanquinone is formulated for intradermal administration.

42. A pharmaceutical composition comprising (a) an amount of phanquinone effective to treat or prevent Alzheimer's disease, and (b) a compound or a mixture of compounds selected from the group comprising antioxidants, acetylcholine enhancers, trace metals, prosthetic groups and clioquinol, provided, when clioquinol is selected, at least one further compound is selected from said group.

43. The pharmaceutical composition, according to claim 42, wherein the total amount of the compounds in (b) is sufficient for increasing the effect of the treatment of Alzheimer's disease or for inhibiting any detrimental side effect.

44. Pharmaceutical composition according to claim 42, wherein the amount of (b) the compound(s) is 5 μg to 250 mg.

45. Pharmaceutical composition according to claim 42, wherein the antioxidant is selected from the group comprising vitamin C, vitamin E, Q10, or combinations thereof.

46. The pharmaceutical composition according to claim 42, wherein the acetylcholine enhancer is tacrine.

47. The pharmaceutical composition according to claim 42, wherein the acetylcholine enhancer is donepezil.

48. The pharmaceutical composition according to claim 42, wherein the prosthetic group is vitamin B_{12}.

49. A pharmaceutical composition, comprising (a) an amount of phanquinone effective to treat or prevent Alzheimer's disease, and (b) a mixture of clioquinol and vitamin B_{12}.

50. Pharmaceutical composition according to any of the claims 42 or 49, which further comprises a pharmaceutical acceptable carrier.

51. Pharmaceutical composition according to any of the claims 42, 49 or 50, wherein the amount of phanquinone is 5 to 250 mg.

52. The pharmaceutical composition according to any of the claims 42, 49 or 50, wherein the amount of phanquinone is 10 mg to 50 mg.

53. The pharmaceutical composition according to any of the claims 42, 49 or 50, comprising an amount of clioquinol effective to improve the treatment or prevention of Alzheimer's disease.

54. The pharmaceutical composition according to any of the claims 42, 49 or 50, comprising an amount of vitamin B_{12} effective to inhibit a detrimental side effect of clioquinol administration.

55. Pharmaceutical composition according to any of the claims 42, 49 or 50, wherein the amount of clioquinol is 5 mg to 250 mg.

56. The pharmaceutical composition according to any of the claims 42, 49 or 50, wherein the amount of clioquinol is 10 mg to 50 mg.

57. The pharmaceutical composition according to claim 49 or 50, wherein the amount of vitamin B_{12} is 5 μg to 2 mg

58. The pharmaceutical composition according to claim 49 or 50, wherein the amount of vitamin B_{12} is 0.5 mg to 1 mg.

59. The pharmaceutical composition according to claim 42, 49 or 50, wherein the composition is formulated for parenteral administration.

60. The pharmaceutical composition according to claim 42, 49 or 50, wherein the composition is formulated for intradermal administration.

61. The pharmaceutical composition according to claim 42, 49 or 50, wherein the composition is formulated for oral administration.

62. The pharmaceutical composition according to claim 42, 49 or 50, wherein the composition is formulated as a tablet.

63. The pharmaceutical composition according to claim 42, 49 or 50, wherein the clioquinol and vitamin B_{12} are formulated in separate pharmaceutical entities, phanquinone being formulated together with clioquinol, vitamin B_{12}, or separate.

64. A kit comprising in one or more containers an amount of phanquinone and clioquinol effective to treat or prevent Alzheimer's disease, and an amount of vitamin B_{12} effective to inhibit a detrimental side effect of clioquinol administration.